dimethylformamide using a palette knife. The mixture was coated onto grained and anodized aluminum using a rubber inking roller to give a wet ink film weight of 1.2 to 2.0 g/m^2. The coated plate was imaged on the horizontal bed image setter as described above. The plate was then developed by application of a 2% solution of Emerald fountain solution (Anchor Pressroom Chemicals) in water and rubbing this with cotton wool to remove the unexposed ink coating leaving behind the exposed coating areas. The typical sensitivity obtained with this system was 750 mJ/cm^2.

After development, the plate was mounted on a Heidelberg Speedmaster 52 printing press and printed copies produced. During this runlength test at least 10,000 copies were obtained from this plate.

Even though some of the above listed inks are stated to be U.V. sensitive they are all infra-red sensitive as they contain carbon black.

It is to be understood that it is not necessary to coat the plate for the printing step with the same ink as used in the imaging step. Any other black or other colored ink can be used.

What is claimed is:

1. A method for preparing a printing form, the method comprising:

coating a layer of a radiation sensitive ink on a lithographic support having a hydrophilic surface layer to form an ink coating,

imaging the ink coating by digital laser means to form exposed areas and unexposed areas of the ink coating, and

acting on the support with aqueous covered dampening rollers to remove the unexposed areas of the ink coating thereby revealing the hydrophilic surface of the support and leaving an oleophilic image formed from the exposed areas of the ink coating,

in which:

the digital laser means emits in the visible or infra-red region of the spectrum;

the ink comprises a radiation absorbing compound;

the radiation absorbing compound is a phthalocyanine pigment; and

the ink additionally comprises an infra-red absorbing dye.

2. The method of claim 1 in which the digital laser means emits in the infra-red region of the spectrum.

3. The method of claim 1 in which the dampening rollers are covered with lithographic fountain solution.

4. The method of claim 1 in the surface of the lithographic support is anodized aluminum, chromium, or a plastic material treated to render it hydrophilic.

5. The method of claim 1 or claim 3 in which the lithographic support is a sleeve or cylinder that fits onto the printing press.

6. The method of claim 1 or claim 3 in which the method is carried out in situ in a printing press.

7. The method of claim 1 or claim 3 in which the ink is sensitive to visible radiation.

8. The method of claim 1 or claim 3 in which the ink is sensitive to infra-red radiation.

9. The method of claim 8 in which the digital laser means emits radiation having a wavelength above 600 nm.

10. The method of claim 1 in which the ink comprises a radiation sensitive resin.

11. The method of claim 10 in which the radiation sensitive resin hardens or crosslinks on exposure to radiation.

12. The method of claim 11 in which the resin is an acrylate resin.

13. A method of printing using the printing form prepared as described in claim 12 in which the same radiation sensitive ink is used in the coating on the hydrophilic support as is used in the printing.

14. The method of claim 11 in which the ink comprises a polymerization initiator.

15. The method of claim 14 in which the polymerization initiator is photolytically decomposed on exposure to suitable radiation.

16. The method of claim 14 in which the polymerization initiator is thermally decomposed on exposure to suitable radiation.

17. The method of claim 1 or claim 3 in which means are present in the ink-train to coat a predetermined thickness of ink onto the hydrophilic surface.

18. The method of claim 17 in which details of the predetermined thickness are fed directly into a laser imaging head which is programmed to adjust incident power and scanning speed to provide the optimum cure and imaging resolution.

19. The method of claim 17 in which a desired run length is predetermined and the thickness of the ink coated is determined according to the desired run length.

20. A method of printing using the printing form prepared as described in claim 1 in which the same radiation sensitive ink is used in the coating on the hydrophilic support as is used in the printing.

21. The method of claim 20 in which the dampening rollers are covered with lithographic fountain solution, the lithographic support is a sleeve or cylinder that fits on to a printing press, and the method is carried out in situ in a printing press.

22. The method of claim 21 in which the ink comprises a radiation sensitive resin that hardens or crosslinks on exposure to radiation.

23. The method of claim 22 in which the radiation sensitive resin is an acrylate resin.

24. The method of claim 1 in which the radiation absorbing dye is selected from the group consisting of dyes of the squarylium, cyanine, merocyanine, indolizine, pyrylinium, and metal dithiolene classes.

25. A method for printing using a printing form, the method comprising:

coating a layer of a radiation sensitive ink on a lithographic support having a hydrophilic surface layer to form an ink coating,

imaging the ink coating by digital laser means to form exposed areas and unexposed areas of the ink coating,

forming the printing form by removing the unexposed areas of the ink coating thereby revealing the hydrophilic surface of the support and leaving an oleophilic image formed from the exposed areas of the ink coating, and

printing using the printing form;

in which:

the digital laser means emits in the visible or infra-rad region of the spectrum;

the same radiation sensitive ink is used in the coating on the hydrophilic support as is used in the printing; and

a desired run length for the printing is predetermined and the thickness of the ink coated is determined according to the desired run length.

26. The method of claim 25 in which the ink comprises a radiation absorbing compound.

27. The method of claim **10** in which the radiation absorbing compound absorbs radiation having a wavelength above 600 nm.

28. The method of claim **25** in which the digital laser means emits in the infra-red region of the spectrum.

29. The method of claim **28** in which the ink additionally comprises an infra-red absorbing dye.

30. The method of claim **25** or claim **29** in which the lithographic support is a sleeve or cylinder that fits onto a printing press.

31. The method of claim **25** or claim **29** in which the method is carried out in situ in a printing press.

32. The method of claim **31** in which the ink comprises a radiation absorbing compound.

33. The method of claim **31** in which:

the unexposed areas of the ink coating are removed by acting on the support with aqueous covered dampening rollers of the printing press;

the dampening rollers are covered with lithographic fountain solution;

the lithographic support is a sleeve or cylinder that fits onto the printing press, and

the printing press comprises an ink-train and means are present in the ink-train to coat a predetermined thickness of ink onto the hydrophilic surface.

34. The method of claim **25** or claim **29** in which the radiation sensitive ink comprises carbon black.

35. The method of claim **25** or claim **29** in which the unexposed areas of the ink coating are removed by acting on the support with aqueous covered dampening rollers of a printing press.

36. The method of claim **35** in which the dampening rollers are covered with lithographic fountain solution.

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